

## Institute of Energy Technology – Professorship of Renewable Energy Carriers

### *Invitation to a Seminar*

**Date:** November 22, 2019

**Time:** 11:00-12:00

**Place:** ETH Zürich, ML-J25

**Speaker:** **Prof. Mario Ragwitz**

Fraunhofer-Institute for Systems and Innovation Research ISI  
Karlsruhe, Germany

**Title:**

**"Future Energy Markets – Challenges of the Paradigm Shift to Renewable  
Energy based Electricity Systems"**

#### **Abstract –**

The recast of the Renewable Energy Directive (RED II) sets the framework for renewable energy in the European Union for the period after 2020 as well as binding European target of 32% renewable energies in final energy consumption by 2030. Although no sectoral target for renewable electricity exists, a likely share will be 60-65%. Since wind energy and photovoltaics are the lowest cost options with high potential the EU electricity mix will soon be dominated by variable renewable energy sources. Future energy markets in the EU and globally need to reflect this paradigm shift and need to incentivize low carbon investments, generation adequacy and flexibility at system level.

**Brief Biography** – Prof. Mario Ragwitz is Deputy Director of the Fraunhofer-Institute for Systems and Innovation Research (ISI). His current scientific work focuses on energy policy analysis and modelling energy systems and includes problems of innovation research, financing of renewable energies, the derivation of R&D strategies and strategies for the market integration of renewable energy technologies. He has coordinated more than 50 research projects on renewable energy policy development at global, EU and national level and authored 60 peer reviewed scientific articles. He worked as a researcher at the Max Planck Institute for Physics of Complex Systems and as a visiting researcher at the University of Texas at Austin and the Lawrence Berkeley National Laboratory. Ragwitz acts as an expert to the German Bundestag and to the European Parliament and advises among others national governments, the European Commission, the World Bank and the IEA. Ragwitz is honorary professor at the University of Freiburg in the field of energy and climate policy and part-time professor at the Robert Schuman Centre for Advanced Studies at the European University Institute in Florence.



Host: Prof. A. Steinfeld, [www.prec.ethz.ch](http://www.prec.ethz.ch)